

BOX -- 10/785,046
Client/Matter: 081468-0308294

REMARKS

Claims 1-20 are pending. By this Amendment, claim 20 is added. Reconsideration in view of the above amendments and following remarks is respectfully requested.

Claims 1-19 were rejected under 35 U.S.C. §102(e) over Nishi (U.S. Patent Application Publication 2001/0010579 A1). The rejection is respectfully traversed.

The Examiner alleges on page 3 of the Office Action that Applicants state in the specification that ZERODUR is manufactured by the process of claim 1 and possesses the characteristics of claims 2-19. The Examiner then concludes that because Nishi discloses in paragraph [0096] the use of ZERODUR, it is inherent that the material used in Nishi is manufactured by the process of claim 1 and possesses all of the claimed characteristics.

Firstly, it is respectfully submitted that Applicants do not state in the specification that ZERODUR is manufactured according to the method of claim 1. Applicants disclose in paragraph [0010] of the specification that ZERODUR is a commercially available glass ceramic material made with various additives to provide a desired low coefficient of thermal expansion (CTE). Applicants further disclose that the CTE is exactly zero at only one temperature so that some thermal expansion and contraction does take place, leading to surface deformations and loss of image quality.

Secondly, it is Applicants who disclose that a component may be manufactured from a material having a coefficient of thermal expansion having a zero-crossing at a temperature between a manufacturing temperature and a mean operating temperature of the component. See, for example, paragraphs [0030] – [0033], of the specification. See also, for example, paragraph [0039], of the specification, where Applicants disclose that the coefficient of thermal expansion zero-crossing temperature can be selected by appropriate control of the additives and/or the manufacturing process. It is Applicants who discovered, disclosed, and claimed forming a component of a material having a coefficient of thermal expansion having a zero-crossing at a temperature between a manufacturing temperature and a mean operating temperature of the component, not Nishi or any of the other prior art of record.

With respect to the Examiner's conclusion that it is inherent that the material in Nishi is manufactured according to the method of claim 1 and possesses all the claimed characteristics, as discussed above, Nishi merely discloses the use of ZERODUR. Nishi does not disclose, suggest, or even remotely hint at selecting a material having a coefficient of thermal expansion having a zero-crossing at a first temperature and manufacturing the component using the selected material at a second temperature, wherein the first temperature